REMARKS

This Amendment amends claims 1, 8, and 14 in accordance with the original disclosure. Claims 8 and 14 have been rewritten in independent form, as suggested by the Examiner. Claims 1-24 remain in this application.

Allowable Subject Matter

In paragraph 7 of the Office Action, the Examiner objected to claims 8 and 14-18 as being dependent upon a rejected base claim but states that these claims would be allowable if rewritten in independent form. As set forth above, Applicant has rewritten claims 8 and 14 in independent form. Claims 15-18 depend from newly independent claim 14. Therefore, in view of the Examiner's statements, claims 8 and 14-18 are now in condition for allowance. Reconsideration of the objections to these claims is respectfully requested.

Rejections under 35 U.S.C. § 102(b)

Claims 1-3, 6, 7, 19, 23, and 24 stand rejected for anticipation by U.S. Patent No. 4,133,403 to Priddy, Jr. (hereinafter "Priddy"). In view of the above amendments and the following remarks, reconsideration of these rejections is respectfully requested.

Claim 1, as amended, is directed to a drive device for a machine. The drive device comprises a traction drive system having a drive axle and a hydraulic work system having at least one electric motor and at least one pump driven by the electric motor. The electric motor and/or the pump of the hydraulic work system are integrated into the drive axle or are located directly on the drive axle.

Priddy is directed to drive means (i.e., a traction drive system) for a vehicle. The drive means includes a first electric motor means 13 having a first electric motor 21 for driving a first wheel 15 and a second electric motor means 17 having a second electric motor 23 for driving a second wheel 19. As shown particularly in Figs. 4 and 5, these electric motors 21, 23 are located in a hub (unnumbered) attached to the outer end of a solid axle 33 or 55. The main drive means includes a first fluid pressure motor means 35 for driving a third wheel 37 and a second fluid pressure motor means 39 for driving a fourth wheel 41.

The main drive means includes a fluid supply means 43 for driving the first and second fluid pressure motor means 35, 39.

Priddy does not teach or suggest the claimed drive device having a traction drive system and a hydraulic work system (e.g., hoisting cylinder, tilting cylinder, or hydraulic steering system as described, for example, in paragraph 6 of the pending application) with the electric motor and/or the pump of the hydraulic work system integrated into the drive axle or located directly on the drive axle. The motors 13, 17 of Priddy are drive motors for driving the wheels 15 and 19. The motors 13, 17 do not drive the pump 59. Additionally, Priddy does not teach or suggest an electric motor and/or a pump of the hydraulic work system integrated into the drive axle or located directly on the drive axle. In Priddy, the motors 13, 17 referred to by the Examiner are drive motors located in the hubs at the ends of the axle. Therefore, claim 1 is not anticipated by Priddy.

Claims 2, 3, 6, 7, 19, 23, and 24 depend from, and add further limitations to, claim 1. Since these claims depend from a claim believed to be in condition for allowance, these claims are also believed to be in condition for allowance.

Rejections under 35 U.S.C. § 103(a)

Claims 4, 5, 9, and 10-12 stand rejected for obviousness over the teachings of Priddy. In view of the above amendments and the following remarks, reconsideration of these rejections is respectfully requested.

As set forth above, while Priddy does teach a traction drive system having electric motors located in the hubs of the traction drive system, Priddy does not teach or suggest the claimed hydraulic work system in which the electric motor and/or the pump of the hydraulic work system are integrated into the drive axle or located directly on the drive axle. The use of electric and/or hydraulic motors to drive the wheels of the vehicle, as taught in Priddy, is known in the art. However, the integration of the electric motor and/or pump of the hydraulic work system integrated into the drive axle or located directly on the drive axle is not taught or suggested in Priddy. Therefore, claims 4, 5, 9, and 10-12 are not believed obvious in view of Priddy.

Claim 13 stands rejected for obviousness over the teachings of Priddy in view of the teachings of U.S. Patent No. 5,289,905 to Braschler. In view of the above amendments and the following remarks, reconsideration of this rejection is respectfully requested.

Priddy has been discussed above. Braschler is directed to a wheel assembly for an off-road mining vehicle having (Fig. 2b) a drive axle 19 having a rotatable wheel rim 42 with pneumatic tires 44 and 46. An electric motor 50 is attached to the housing 40 and house an output drive shaft 52 for transmitting output drive energy into the rotational energy of the wheel rim and tire assembly. The device further includes a hydrodynamic retarder 60. However, as clearly taught in Braschler at column 4, lines 6-21, the electric motors of the Braschler embodiments are drive motors (traction motors) and are not associated with the hydraulic work system. Thus, Braschler, either alone or in combination with Priddy, does not teach or suggest the claimed drive device having a traction drive system and a hydraulic work system with the electric motor and/or the pump of the hydraulic work system integrated into the drive axle or located directly on the drive axle. Therefore, claim 13 is not believed obvious in view of the Priddy and Braschler combination.

Claims 20 and 21 stand rejected for obviousness over the teachings of Priddy and Braschler as described above in further view of U.S. Patent No. 4,570,741 to McCoy.

Priddy and Braschler have been discussed above. McCoy discloses a drive system for a mining machine having an electrical motor directly driving a wheel and driving a hydraulic pump through a clutching mechanism. In McCoy, the drive means 24 comprises an electrical drive motor 25 mechanically connected to a wheel 12. Thus, the electrical drive motor 25 is a traction motor, not part of the hydraulic work system. While the electrical drive motor 25 does drive a hydraulic pump 26, this hydraulic pump 26 provides fluid for operation of the propulsion means, not to the hydraulic work system, as claimed in claim 1 (McCoy at column 2, lines 26-35). Thus, McCoy also does not teach or suggest the claimed drive device and a hydraulic work system with the electric motor and/or the pump of the hydraulic work system integrated into the drive axle or located directly on the drive axle. Therefore, claims 20 and 21, which depend from claim 1, are not believed obvious in view of the Priddy, Braschler, and McCoy combination.

Claim 22 stands rejected for obviousness over the teachings of Priddy and McCoy. Both Priddy and McCoy have been discussed above. Neither of these references, either alone or in combination, fairly teaches or suggests the claimed traction drive system and hydraulic work system structure as claimed in claim 1, from which claim 22 depends. Therefore, claim 22 is believed allowable for substantially the same reasons as discussed above. Reconsideration of the rejection of claim 22 is respectfully requested.

Conclusion

In view of the above amendments and remarks, Applicant believes claims 1-24, as amended, are patentable over the cited prior art and are in condition for allowance. Reconsideration of the rejections and objections and allowance of claims 1-24 are respectfully requested.

Respectfully submitted,

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